

DTIC FILE COPY

(1)

Technical Report 907

The Determinants of Job Satisfaction in U.S. Army Reserve/National Guard Units: A Multidisciplinary Analysis

Hyder A. Lakhani
U.S. Army Research Institute

August 1990

AD-A229 014

DTIC
ELECTED
NOV 14 1990
S E D



**United States Army Research Institute
for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited.

90 11 13 181

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency Under the Jurisdiction
of the Deputy Chief of Staff for Personnel

EDGAR M. JOHNSON
Technical Director

JON W. BLADES
COL, IN
Commanding

Technical review by

Paul A. Gade
Jacquelyn Scarville



Accession For	
NTIS	GRA&I
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Distr	Avail and/or Special

A-1

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-POX, 5001 Eisenhower Ave., Alexandria, Virginia 22353-5600.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified		1b. RESTRICTIVE MARKINGS ---	
2a. SECURITY CLASSIFICATION AUTHORITY ---		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE ---		4. PERFORMING ORGANIZATION REPORT NUMBER(S) ARI Technical Report 907	
5. MONITORING ORGANIZATION REPORT NUMBER(S) ---		6a. NAME OF PERFORMING ORGANIZATION U.S. Army Research Institute	
6b. OFFICE SYMBOL (If applicable) PERI-RP		7a. NAME OF MONITORING ORGANIZATION ---	
6c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, VA 22333-5600		7b. ADDRESS (City, State, and ZIP Code) ---	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Research Institute for the Behavioral and Social Sciences		8b. OFFICE SYMBOL (If applicable) PERI-R	
8c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, VA 22333-5600		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER ---	
10. SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO. 62785A		PROJECT NO. 791	
11. TITLE (Include Security Classification) The Determinants of Job Satisfaction in U.S. Army Reserve/National Guard Units: A Multidisciplinary Analysis		TASK NO. (2304) 243	
12. PERSONAL AUTHOR(S) Lakhani, Hyder A.		WORK UNIT ACCESSION NO. H1	
13a. TYPE OF REPORT Final	13b. TIME COVERED FROM 89/10 TO 90/05	14. DATE OF REPORT (Year, Month, Day) 1990, August	15. PAGE COUNT

16. SUPPLEMENTARY NOTATION
--

17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Job satisfaction	Psychology	Logit model
			Enlisted Reserves/NG	Sociology	
			Economics	Factor analysis	(Continued)

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This research reports an empirical analysis of job satisfaction in the U.S. Army Reserve/National Guard units. Job satisfaction is explained in terms of an economic theory of the effect of pay, the psychological theory of commitment and motivation, and a sociological theory of positive interdependence of work life and family life. Data from an Army Experience Survey, 1985, were developed to obtain 10 factors that were used to predict job satisfaction in a logit model of job satisfaction. The results revealed that, as expected, job satisfaction was explained by variables from all the three disciplines. In particular, job satisfaction was related positively to an increase in pay, positive job experience, perceptions and realizations of schooling/training motive, and soldiers' satisfactory relationships with spouses and children. Job satisfaction was related negatively to an increase in dissatisfaction with the job environment, uninteresting work, long working hours, and unfair treatment.

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION Unclassified	
22a. NAME OF RESPONSIBLE INDIVIDUAL Hyder Lakhani		22b. TELEPHONE (Include Area Code) (202)274-8119	22c. OFFICE SYMBOL PERI-RP

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

ARI Technical Report 907

18. SUBJECT TERMS (Continued)

Army Experience Survey data, 1985

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Technical Report 907

**The Determinants of Job Satisfaction in
U.S. Army Reserve/National Guard Units:
A Multidisciplinary Analysis**

Hyder A. Lakhani
U.S. Army Research Institute

Personnel Utilization Technical Area
Paul A. Gade, Chief

Manpower and Personnel Research Laboratory
Zita M. Simutis, Director

U.S. Army Research Institute for the Behavioral and Social Sciences
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
Department of the Army

August 1990

Army Project Number
2Q162785A791

**Manpower, Personnel,
and Training**

Approved for public release; distribution is unlimited.

FOREWORD

The Personnel Utilization Technical Area of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) performs multidisciplinary research on soldier retention, job satisfaction, and readiness/performance. This report addresses the impact of economic, psychological, and sociological variables on job satisfaction in the U.S. Army Reserve/National Guard units. The report was prepared as part of ARI's research support for the Community and Family Support Center of the Office of the Deputy Chief of Staff for Personnel.

The research presented in this report quantifies several of the economic, psychological, and sociological variables thought to affect job satisfaction and increase retention.

This in-house research was sponsored by the Program Analysis and Evaluation Office, U.S. Army Community and Family Support Center (CFSC), as part of the Army Family Research Program.



EDGAR M. JOHNSON
Technical Director

THE DETERMINANTS OF JOB SATISFACTION IN THE U.S. ARMY RESERVE/
NATIONAL GUARD UNITS: A MULTIDISCIPLINARY ANALYSIS

EXECUTIVE SUMMARY

Requirements:

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conducts research on manpower, personnel, training, and job satisfaction issues of significance and interest to the U.S. Army. Questions have been raised about the Army's ability to provide job satisfaction and retain high-quality soldiers.

Procedure:

The author used data from an Army Experience Survey, 1985, of Army veterans who served in the Reserve/National Guard units. The economic, psychological, and sociological variables were developed and reduced by factor analysis to obtain eight multidisciplinary clusters. The factor scores and other independent variables were used in a logit model to predict job satisfaction.

Finding:

The results reveal that, as hypothesized, job satisfaction was explained by variables from all the three disciplines. In particular, job satisfaction was enhanced with an increase in pay, positive impact of Army job experience, perceptions and realizations of schooling/training motive for joining the Army, and the soldiers' satisfaction of relationships with their spouses and children. On the other hand, job satisfaction decreased with an increase in dissatisfaction with the job environment, uninteresting work, long working hours, and too much unfair treatment.

Utilization of Findings:

This research suggests that, in order to increase job satisfaction, which, in turn, increases retention, policy makers should consider increasing pay; producing positive impact of Army service; meeting schooling/training motives of the enlisted soldiers; and providing programs that contribute to the soldiers' satisfaction of relationships with their families. Also, the

policy makers should reduce the detractors of job satisfaction by improving work environment, reducing uninteresting work, reducing unduly long working hours, and mitigating unfair treatment.

THE DETERMINANTS OF JOB SATISFACTION IN THE U.S. ARMY RESERVE/
NATIONAL GUARD UNITS: A MULTIDISCIPLINARY ANALYSIS

CONTENTS

	Page
INTRODUCTION	1
LITERATURE REVIEW.	2
DATA AND FACTOR ANALYSIS	3
LOGIT MODEL.	5
CONCLUSIONS AND POLICY IMPLICATIONS.	14
SELECTED REFERENCES.	19
APPENDIX. ARMY EXPERIENCE SURVEY.	A-1

LIST OF TABLES

Table 1. List of variables and factors.	6
2. Logit regression for satisfaction with Reserve/ National Guard units	16

THE DETERMINANTS OF JOB SATISFACTION IN U.S. ARMY RESERVE/NATIONAL GUARD UNITS: A MULTIDISCIPLINARY ANALYSIS

"Economics, without psychological and sociological research, is a one bladed scissors". (Simon, 1986)

1.0 INTRODUCTION

The Congress of the United States has decided that the Reserve and National Guard units shall be a growing and a significant proportion of the total force. The required growth in this component can be obtained from direct recruitment as well as from hiring veterans. During the 1980s, about 100,000 soldiers separated from the Army after completing their first, second or third tours of duties. The rate of this attrition is likely to increase in the early nineties due to the proposed "downsizing" of the Active Army from 780,000 in 1990 to 580,000 by the end of fiscal 1996 in the wake of the recent changes in Eastern Europe (The Washington Post) and the budget constraints. Marsh (1990) noted that, starting the fiscal year 1991, the Army can expect to lose an annual average of more than 5,000 noncommissioned officers with from seven to 18 years' service. He added that, "by one estimate, some 1,600 commissioned officers will be separated from the Army in the first year, and nearly 10,000 over six years. The actual total would be much higher".

The attrition will be both voluntary and involuntary and will consist of several high quality soldiers. Some of these prior service soldiers can be induced to join the Army Reserve force or the National Guard units, thereby preserving the quality of the total Army, to the maximum possible extent. The service in the Reserve/National Guard will also help the Army maintain readiness at a lower cost (compared to the cost of increasing the size of active Army) because these veterans have been already trained (Schank et al., 1987). It will also help the reservists use their Army training and experience; they will also earn reserve pay, retirements points (which count as partial credit toward continuation of active service retirement benefits) and such other Army benefits as the once a month use of Post Exchange and commissary facilities. This mutual advantage can be increased if more veterans join and continue to remain in the Reserve/National Guard Units. The continuation rate is likely to depend upon their job satisfaction with the Reserve and National Guard units.

Job satisfaction is a subject of interest to several disciplines. Economists are interested in it in order to understand job performance, which is a proxy for labor productivity. Economists measure labor productivity in terms of output per unit of input, such as labor. While these measures can and have been used for the aggregate economy and in

agricultural and manufacturing industries (Gollop and Jorgenson, 1980; Baumol, 1985), they are not very useful in service industries because it is difficult, if not virtually impossible, to define and measure output in these industries. It is suggested in this study that in such service industries as the government, in general, and the U.S. Army Reserve/National Guard (NG) units in particular, job satisfaction can be used as a proxy for productivity. Social, industrial, and organizational psychologists are interested in job satisfaction for understanding productivity, career commitment, motivation and job turnover. Sociologists are interested in job satisfaction for comprehending its relationship with the quality of life, in general, and in particular, the satisfaction with family life. Each of these disciplines, however, tends to analyze job satisfaction by using variables of its specific discipline only. Statistically, exclusion of relevant variables from an equation results in an omitted variables bias in the estimated equation.

The rest of this study is organized as follows. The next section discusses psychological, economic, and sociological literature on the determinants of job satisfaction or productivity. Section 3 outlines the survey design and methodology for conducting the Army Experience Survey, 1985 -- the database analyzed in this study. The conceptual and empirical model is presented in section 4 and the last section reports conclusions and policy implication of this analysis.

2.0 Literature Review

Psychologists postulate and validate a positive relationship between productivity (or performance or profitability) and job satisfaction. Parker and Kleemeier (1951) note that "management has at long last discovered that there is greater production, and hence greater profit, when workers are satisfied with their jobs. Improve the morale of the company and you improve production". Strauss (1968) notes that "early human relationists viewed the morale - productivity relationship quite simply: higher morale would lead to improved productivity." Vroom (1964) found that the correlation between job satisfaction and performance is positive in 20 of 23 cases and the median correlation is (+.14). Vroom's weak results have been improved in a number of studies, especially those by Lawler (1967), Porter and Lawler (1968), and Stone et al (1977). For example, Stone et al. (1977) obtained a correlation of .38 between job satisfaction and job scope and the correlation increased to .5 when need for achievement was added as a predictor.

Economists generally relate job satisfaction to such economic variables as labor market experience, relative wages, human capital, unionization and characteristics of a plant or a firm within an industry (Dalton and Mareis, 1986; Borjas, 1979; Freeman, 1978). For example, Dalton and Marcis (1986) analyzed

the National Longitudinal Surveys, 1980 youth cohort, and concluded that job satisfaction of female workers was more closely associated with the wage rate, experience in the labor market, and tenure at the job relative to job satisfaction of male workers.

Organizational sociologists have stipulated theories of relationships between job satisfaction and satisfaction with family life. For example, Wilensky (1960) postulated three theories. The first is a theory of spillover from job satisfaction to satisfaction with family life. This theory predicts a positive relationship between these two variables. The second is the compensatory theory which stipulates that an increase in one of the variables results in a decrease in the other. This is because the job-dissatisfied worker tries to compensate the job dissatisfaction by increasing his/her satisfaction with family life. The third theory states that there is no relationship between them. The theory of positive spillover between work life and family life has been empirically verified (Lakhani, 1989; Lieu et al., 1990). A limitation of sociological and psychological studies is that only a few of these studies use multiple regressions which permit statistical control for other explanatory variables. Hopkins (1983) reviewed over 2,000 separate studies and noted that fewer than a handful utilized multiple regression as an analytic technique.

3.0 Data and Factor Analysis

The sample of soldiers in Reserve/National guard units used in this study comprised of enlisted soldiers who separated from active Army and joined these units after their separation. The data were developed from the Army Experience Survey, 1985. This sample includes soldiers in these Reserve/National Guard units as well as veterans who were not in these units. The latter group serves as a control group for the estimated equation. The Army Experience Survey was a stratified random survey of Army enlisted veterans who separated between 1 October 1981 and 30 September 1984 (Westat, 1986). The survey asked the veterans about their satisfaction levels while they were in the Army and while they were in the Reserve/National Guard units. They were also asked about the environment in the Army and the reasons for their satisfaction or dissatisfaction. The survey did not ask the veterans in the Reserve/National Guard units about the environment in their units. Therefore, it was assumed in this study that the environment in the Reserve/National Guard units was comparable with that in the active Army because most of the veterans tend to join the Reserve/NG units that are similar to their active Army units.

The survey included over one hundred variables. As there were several irrelevant variables, we sorted them to select those variables that represented key behavioral attitudes that could be

used as multidisciplinary explanatory variables to predict job satisfaction. This selection provided 50 variables. In order to further reduce the number of variables, as well as to obtain representative clusters of multidisciplinary variables, an exploratory factor analysis was conducted. The variable for job satisfaction in Reserve/National Guard units was excluded from factor analysis variables because it was used as a dependent variable in a second stage of analysis with logit regression. Its inclusion in the factor analysis would have precluded its independence from related variables. Ten factors were specified for extraction using the maximum likelihood method with eigen values of one or above. The data were rotated to obtain an orthogonal factor structure by the Varimax rotation procedure. Orthogonality or independence of a factor from another factor was desired for the second stage of the analysis where factor scores were used as predictor variables in logit regressions. Eight factors were identified. The factor structure is summarized in Table 1. Together, these factors explained 58.85 percent of the total variance. Even though the sixth and the subsequent factors contributed relatively less to the total variance, we retained them because of their theoretical significance e.g. for testing institutional versus occupational soldier hypotheses (discussed later).

The results of the factor analysis, displayed in Table 1, reveal that variables from more than one discipline often combined to constitute a factor. The first factor was labelled by us as the "positive Army impact". It comprised of twelve related items or variables from the three disciplines. For example, it had such psychological variables as leadership ability and ability to make friends, as well as the sociological variable on pride in serving country and the economic variable on the development of job skills. The size of factor score of a variable in this Table indicates the importance of the variable. For example, in the first factor on positive Army impact, the most important variable is the development of pride in self (.77), followed by the development of self confidence (.74), and so forth. The second factor represented separatees who were dissatisfied with their environment. This factor contained 14 variables from the three disciplines. For example, the economic, psychological and the sociological variables were pay was too low, apathetic officers and inadequate family services respectively. The third factor, ("Exit for family problems") included seven family-related variables from the three disciplines. e.g. the economic variable was pay was: too low, the psychological variable was: long working hours and the sociological variable was : family wanted out. The fourth and the fifth factors respectively denoted educational levels and schooling/training motivations of the soldiers. The items included in the schooling/training motive for enlisting were also from the three disciplines, e.g. it had the economic variable : money for college, the psychological variable : to go to college,

and the sociological variable: to use service benefits. The sixth factor comprised of soldiers who enlisted for personal improvement. Examples of economic, psychological and sociological variables in this factor were: to earn more money, to prove I could do it, and unemployed. The last two factors represented the two conflicting motives of "institutional" (or patriotic soldiers who view military service as a calling) versus the "occupational" (or the economically motivated) soldiers. The latter group views military service as a job (Segal, 1986). These two factors did not comprise multidisciplinary variables because there were only three items in each of the factors. The factor on institutional soldier comprised of only sociological variables (to serve my country, family tradition, and pride in serving country) and that for the occupational soldier comprised of economic variables (earn more money, develop a skill and self-improvement).

The composition of the factors revealed that there were only three (out of fifty) variables that overlapped over two factors. For example, the variables: exit because pay was too low, and exit for long working hours, were included in the two factors: dissatisfaction with the environment, and exit for family problems. This is because both of these variables are interrelated, they both indicated reasons for quitting. Similarly, the variable: exit for inadequate family services, was included in the two factors: dissatisfaction with environment, and exit for family problems. In this case, both the factors appear to be interrelated. The oblique rotation technique would have eliminated this overlap. We did not use the oblique rotation technique because the second stage of our analysis, namely the logit model, required the factors to be orthogonal.

4.0 Logit Model

Job satisfaction is generally measured in psychology in terms of an overall job satisfaction by asking respondents whether they are satisfied or dissatisfied with their jobs. Empirically, it is traditionally measured on a four-point Likert scale varying from very satisfied to very dissatisfied (Locke et al., 1964). A study of efforts at changing this scale notes that "it is not clear whether many of the newer measures are, in fact, measuring the same thing as a simple satisfaction rating" (Wanous and Lawler, 1972). Therefore, the satisfaction level of the veterans in this study is a general measure determined from responses to the question: "How satisfied were you with your National Guard or Reserve Unit?". The responses were coded on a four-point Likert scale: very satisfied, satisfied, dissatisfied and very dissatisfied. We combined the first and the second responses to represent soldiers generally satisfied with Reserve National Guard service and the last two responses to indicate generally job-dissatisfied soldiers. The attribute of being a satisfied

TABLE 1
LIST OF VARIABLES AND FACTORS

Factor	Rotated Factors Structure	Factor Loadings
Factor 1: Positive Army Impact		
Variables:	Development of job skills	.49
	Development of self-confidence	.74
	Development of leadership ability	.70
	Development of ability to work with others	.72
	Developed respect for authority	.61
	Developed pride in self	.77
	Developed openness to new ideas	.62
	Pride in serving country	.52
	Increased ability to make friends	.60
	Established independence	.63
	Developed self-discipline	.70
	Self-improvement	.35
Factor 2: Separated for Dissatisfaction with Environment		
Variables:	Apathetic Officers	.66
	Failed to get promoted	.48
	Poor non-commissioned officer leadership	.66
	Pay was too bad	.35
	Long working hours	.39

TABLE 1 (continued)

Factor	Rotated Factors Structure	Factor Loadings
Factor 2: Separated for Dissatisfaction with Environment (continued):		
Variables:	No credit for good work	.73
	Lacked training I wanted	.32
	Didn't get along with NCOs	.51
	Too many rules	.39
	Didn't get along with NCOs	.27
	Too much unfair treatment	.78
	Uninteresting work	.51
	Inadequate family services	.28
Factor 3: Separated for Family Reasons		
Variables:	Too many permanent change of status moves	.49
	Pay was too low	.31
	Long working hours	.40
	Too much family separation	.66
Factor 4: Education Level		
Variables:	Pre-enlistment	.66
	When left Army	.7
	Current i.e., after leaving Army	.68
Factor 5: Schooling/Training Motive for Enlisting		
Variables:	Money for college	.59

TABLE 1 (continued)

Factor	Rotated Factors Structure	Factor Loadings
Factor 5: Schooling/Training Motive for Enlisting (Continued)		
Variables:	Lacked training I wanted	.88
	To go to school/college	.51
	To use service benefits	.57
Factor 6: Personal Improvement Reasons for Enlistment		
Variables:	I was unemployed	.33
	I proved I could do it	.51
	To be on my own	.66
	To earn more money	.47
	To travel	.37
	To solve a personal problem	.37
	To mature	.48
Factor 7: Institutional or Patriotic Soldier		
Variables:	To serve my country	.79
	Family tradition to serve country	.29
	Pride in serving country	.51
Factor 8: Occupational Soldier		
Variables:	Self-improvement motive to enlist	.46
	To develop a skill	.69
	To earn more money	.36

soldier was assigned a binary value of one and the dissatisfied characteristic was given a value of zero. This binary variable was used as a dependent variable to explain satisfaction with Reserve/National Guard service. We used a non-linear multivariate logistic regression model to explain job satisfaction because the criterion variable was discrete so that ordinary least squares equations were ill-advised since they are inefficient (Ben-Akiva and Lerman 1986). A maximum likelihood procedure was used to obtain the model parameter estimates. The observations on individual respondents were from the Army Experience Survey database. The predictors included the factor scores characteristics of the individual soldiers in the eight factors and several other independent variables discussed below.

The positive Army impact (factor 1) was hypothesized to relate to job satisfaction with Reserve/National Guard service positively because of the soldier's perceptions of receiving long term benefits associated with the positive impact of the Army. Soldiers who were dissatisfied with their environment while they were in Army service (factor 2) were postulated to be dissatisfied with their jobs. One of the reasons for this hypothesis is that prior service soldiers generally tend to join the Reserve/NG units that are similar to the active Army units in which they were trained and the environment in these units is likely to be similar. The decision to join similar units is to avoid the retraining costs to the soldier and to the Army. The characteristic of the veterans who stated that they separated because of family problems in the Army (factor 3) was expected to be negatively related to job satisfaction with Reserve/National Guard service because the family problems tend to get accentuated in the Reserve/NG units when the veterans have to work on weekends. The educational progress (factor 4) achieved while serving as enlisted soldiers was hypothesized to be positively related to satisfaction with service in Reserve National Guard units since the Army facilitated continuation of their education. The soldiers who joined the Army with a schooling/training motive (factor 5) and left thereafter to go to college were predicted to be satisfied with service in Reserve/National Guard units because they had achieved their college objective. The enlistees who joined the Army for personal improvement motive (factor 6) were also hypothesized to be satisfied with service in Reserve/National Guard units because service in the Army facilitated their personal improvement which was assumed to have continued while they served in Reserve/ National Guard units. The institutional soldiers (factor 7), that is, the soldiers who joined for patriotic or traditional motives, were expected to be satisfied with service in Reserve/National Guard units. Since work in the Reserve/National Guard units is similar to that in the active Army, it is assumed that expectations of these institutional soldiers would be similar. The occupational soldiers (factor 8) were expected to be dissatisfied with service in Reserve/ National Guard units as is shown in the available

literature on active duty soldiers (Segal, 1986). We assumed that soldiers who joined the active Army as occupational soldiers also joined the Reserve/National Guard units for such occupational reasons as extra money, retirement benefits and PX and commissary benefits. Since it is pragmatically difficult to separate institutional soldiers from occupational soldiers, we assumed that the factor comprising the motivation for joining the Army, namely, (i) to serve my country, (ii) family tradition to serve country, and (iii) pride in serving country, represented institutional soldiers. On the otherhand, the occupational soldiers were denoted by the three motivators, (i) self-improvement motive to enlist, (ii) to develop a skill, and (iii) to earn more money.

The hypothesized relationships of the variables of specific disciplines to job satisfaction in Reserve/National Guard units were as follows:

(i) **Satisfaction with Army Service:** Soldiers who responded that they were satisfied or very satisfied with active Army service were hypothesized to be satisfied with their jobs in Reserve/National Guard units because work in the Reserve/National Guard units is likely to be similar to the work in the active Army because the veterans tend to join Reserve/NG units that are similar to their active Army units where they were trained.

(ii) An increase in satisfaction with the relationship with one's spouse was expected to increase satisfaction with Reserve/National Guard service because of the spillover theory of work life and family life (Wilensky, 1960). This theory has been supported empirically (Liou, et al., 1990). About 54% of the respondents in the sample were married. This variable was assumed to be a proxy for utilization of several family - related Army programs that strive to increase a soldier's satisfaction with the relationship with his/her spouse. Examples of these programs are: child care centers, spouse employment assistance, and continuing education. This variable was developed from the question: "If you were married during Army service, what type of effect, if any, did your Army service have on your relationship with your spouse?" The five point Likert scale -- from strong positive effect to strong negative effect -- was converted to a binary variable by defining the positive effects = 1, the negative effects = 0 and by excluding the no effect responses.

(iii) Satisfaction with relationship with children was expected to increase satisfaction with Reserve/National Guard service because it is part of satisfaction with family and was expected to continue during service in Reserve/National Guard units. Examples of programs for children are recreation, drug abuse, and youth development. It was assumed that an increase in

utilization of these programs would tend to increase a soldier's satisfaction of relationship with children. This variable was developed from responses to a question similar to that in (ii).

(iv) The characteristic of the soldiers who indicated that their active Army experience was valuable or very valuable were expected to be more satisfied with their Reserve/National Guard units than soldiers who responded that their Army experience was not very valuable. This variable was included because even if a soldier was not satisfied with the Army, his Army experience might be perceived to be valuable.

(v) Age was expected to be a negative predictor because older persons generally find it difficult to adjust to the dynamic, youthful, environment in the Reserve/National Guard units because of biological aging that reduces sensorimotor performance, muscle strength, visual acuity, reaction time and balance.

(vi) Black soldiers were hypothesized to be more satisfied with Reserve/National Guard service than non-black because civilian opportunities for higher incomes from moonlighting may be more limited for blacks than for non-Blacks. Moskos (1986) noted that racial discrimination was abolished from the Army long before it was addressed in the civilian sector.

(vii) Married soldiers, in general, and

(viii) soldiers having children, were hypothesized to be dissatisfied with service in Reserve/ National Guard units because it required frequent deployment, weekend duties and training movements which tend to disrupt family life.

(ix) An increase in the number of enlistment terms served by a soldier was hypothesized to be positively associated with service in the Reserve/National Guard units because it tends to reflect the soldier's career commitment, especially since this service counts toward retirement benefits.

(x) The relationship between higher education of a soldier at the time of enlistment and job satisfaction was difficult to predict because of two forces pulling in opposite directions. On one hand, higher education was expected to be positively related to satisfaction with Reserve/National Guard service because it enabled comprehending the complex technology of the current weapon systems (Binkin, 1985). On the other, more educated soldiers have higher opportunity costs since they are likely to have better paying primary jobs in civilian sector with higher demands from these employers. These civilian jobs tend to reduce their job satisfaction levels in the Reserve/National Guard units.

(xi) Soldiers who enlisted in the active Army to earn enlistment bonuses paid in specific, hard to fill, occupations were hypothesized to be satisfied with service in Reserve/National Guard units since they achieved their objective of extra money.

(xii) Male soldiers were hypothesized to be satisfied with Reserve/National Guard service than female soldiers because the predominantly male composition of the Army Reserve/National Guard units fosters cohesion and camaraderie among male soldiers. On the otherhand, the job satisfaction of female soldiers is likely to be enhanced by their assignment to professional occupations which impart general, instead of firm-specific or Army-specific, training. Female soldiers in the general occupations with skills which are transferable to the civilian sector are, therefore, likely to be more satisfied relative to male soldiers who predominate in occupations in which the skills are not readily transferred to the civilian sector (Lakhani, 1988). In short, the sign of the gender - job satisfaction relationship depends upon the social dynamics of the unit and whether the soldier has Army-specific skills.

(xiii) An increase in veteran's income (civilian earnings) was hypothesized to relate positively to satisfaction with Reserve/National Guard service because the availability of higher civilian income indicated that the veteran was serving the Reserve/National Guard unit for non-monetary motive.

(xiv) An increase in the family income of the veteran was hypothesized to be positively related to satisfaction with service in Reserve/National Guard units because the potential income of the spouse, which was not fully realized while the veteran was in the service, was now being realized. This variable was not correlated with the variable on veteran's income because earnings of spouses were considerably less than veteran's income due in part to interruptions in services of the spouses due to frequent permanent change of station relocations of their spouses.

(xv) Soldiers who involuntarily left the Army prior to completion of their first term of service were hypothesized to be dissatisfied with their Reserve/National Guard units. This is because most of the first term attrition was due to failure to complete training which took place during the first six months (Weiland, et al., 1986). Their inability to successfully complete training, an index of performance, was likely to persist in the Reserve/National Guard units because jobs in these units were similar to active Army jobs.

(xvi) Soldiers who intended to make the Army a career at the time of their enlistment were hypothesized to be satisfied with

the Reserve/National Guard service because service in these units reflected career commitment.

The estimated coefficients are shown in Table 2. The log likelihood ratio (analogous to R-square) and its associated model Chi Square statistic were statistically significant. All of the hypotheses were supported because the coefficients for the predictor variables had the hypothesized signs. Ten coefficients, discussed below, were statistically significant either at the 0.01 or 0.1 level.

First, as hypothesized, an increase in the Army's positive developmental impact (factor 1) tended to increase job satisfaction with Reserve/National Guard units. It might be recalled that this developmental impact factor included twelve socio-psychological variables such as: the development of job skills, self-confidence, leadership ability, ability to work with others, respect for authority, pride in self, openness to new ideas, pride in serving country, ability to make friends, establishing independence, self-discipline and self-improvement. Second, an increase in dissatisfaction of the soldiers with the environment while they were in the Army (factor 2) tended to decrease job satisfaction level in these units. The environmental factor included such multidisciplinary variables as: apathetic officers, failure to get promoted, poor non-commissioned officers, low pay, long working hours, no credit for good work, lack of required training, too many rules, too much unfair treatment and uninteresting work. Third, an increase in the soldiers who had enlisted in the active Army for schooling/training motive (factor 5) had increased job satisfaction level with these units. The multidisciplinary variables that comprised this explanatory factor included soldiers who had enlisted to: earn money for college, obtain training that they lacked, go to school/college or use service benefits. Fourth, an increase in the institutional orientation of soldiers (factor 7) increased satisfaction with Army Reserve/National Guard units.

Apart from the preceding sets of variables constituted in the factors, there were six independent variables that also explained job satisfaction. First, the sociological variable on the effect of Army service on satisfaction of relationship with spouse during service increased job satisfaction in the Reserve/National Guard units. Therefore, Wilensky's spillover theory of positive relationship between work life and family life was supported by this result. Second, as hypothesized, black soldiers were more satisfied with these units relative to non-black soldiers because black soldiers experienced less discrimination in the Army relative to that in the civilian sector jobs. This demographic variable is common to all the three disciplines. Third, the economic variable on the recipients of enlistment bonuses showed that they were more satisfied with these units relative to non-recipients. Fourth, the economic variable on an increase in a

veteran's income tended to enhance job satisfaction. Fifth, the psychological variable on involuntary attritees from the active Army showed that they were more dissatisfied with jobs relative to non-attritees. Finally, as per the psychological career commitment hypothesis, veterans who intended to make Army a career at the time of their enlistments were more satisfied relative to soldiers who did not intend to make the Army a career.

To sum up, variables from all the three disciplines play a part in explaining job satisfaction. For example, the most important of the eight factors is the institutional/patriotic soldier with a regression weight of .24, followed by the positive Army impact factor with a regression weight .21 and the schooling/training motivation factor with a regression weight of .17. While these three factors increased job satisfaction, the factor on separation due to dissatisfaction with environment reduced job satisfaction (Beta = -.13).

The net effect of the job satisfaction enhancing and detracting factors, that is, the tradeoffs across these factors is, however, positive ($.24 + .21 + .17 = .62$ minus $.13 = .49$) so that the overall Army environment for job satisfaction appears to be positive (.49). The overall Army environment for job satisfaction can, however, be improved further by changing the variables that contribute to the negative relationship. These include: reducing apathetic officers, enhancing leadership abilities of non-commissioned officers, reducing unduly long working hours, giving credit for good work, providing the needed training and bringing about unit cohesion. The relative importance of the specific variables of any single discipline cannot be separated out for factor scores since the factors are a composite of variables from all the three disciplines. The non-factor score variables, however, revealed that the most important (coefficient = .35) variable that increased job satisfaction was race -- an increase in the number of black soldiers tended to increase their job satisfaction. This was followed by the economic variable on enlistment bonus recipients (.31), which, however, is not likely to be increased in the current environment of downsizing and budget constraint. The next important variable was the sociological one of an increase in the effect of Army service on satisfaction of relationship with spouse during Army service (.30). The fourth significant predictor was, once again, economic, namely the veteran's income (01).

5.0 Conclusions and Policy Implications

Job satisfaction in the Army Reserve/National Guard units of enlisted soldiers was explained by several multidisciplinary variables. Three major clusters of multidisciplinary variables that significantly explained job satisfaction positively were veterans who responded that: (i) Army service had a positive

impact on them, (ii) they had enlisted for schooling/training motive and (iii) they were institutional/patriotic soldiers.

Dissatisfaction with service in Reserve/National Guard was expressed by veterans who said that they left the Army for dissatisfaction with the environment. The individual variables that explained job satisfaction in the Reserve/National Guard units also came from economics, psychology and sociology. An increase in "veteran's income" after separation from active Army increased job satisfaction in the Reserve/National Guard units significantly because the economic returns to Army training were realized in the long run. The sociological variable that increased job satisfaction was an increase in satisfaction with family life which was represented by the effect of Army service on satisfaction of relationship with spouses during the service. Also, black soldiers and servicemen who were recipients of enlistment bonuses and/or the GI bill benefits for education or training were more satisfied with their jobs relative to non-blacks and the non-recipients of the bonuses.

One of the policy implications that emerges from this analysis is that job satisfaction is a multi-dimensional issue. These dimensions include economic, psychological and sociological variables. The dimensions were observed in the variables comprising the factors as well as in the independent variables used as predictors from the specific disciplines. The results of the analysis revealed that job satisfaction can be increased by changing such economic variables as payment of enlistment bonuses as well as changing the job environment emphasized by sociologists and social psychologists. An increase in enlistment bonuses is, however, unlikely to take place in the face of downsizing of the Army and the budget constraint. The job environment can, however, be improved by addressing such socio-psychological measures as: reducing apathetic officers and/or retraining them to change their attitudes toward the soldiers, reducing work hours, reducing the number of rules, ensuring equitable treatment, giving credit for good work, providing appropriate training to the soldiers, increasing cooperative peers, and enhancing self-confidence of the employees. The findings also indicate that job satisfaction might be enhanced by policies which support families and family programs. The specific family measures can be extending to the Reserve component the current programs that exist for the active Army, namely, quality health care at a reasonable cost, child care and child development services, youth programs, family advocacy, child and spouse abuse activities, foster care, consumer affairs, financial management assistance centers, exceptional family member assistance, survival benefits and recreational programs.

TABLE 2
LOGIT REGRESSION FOR SATISFACTION WITH
RESERVE/NATIONAL GUARD UNITS

Predictor	Beta Coefficient	Chi Square
Factor 1: Positive Army Impact	0.21**	6.93
Factor 2: Exit for Dissatisfaction with Environment	-.13**	3.41
Factor 3: Exit for Family Problems	-.09	1.68
Factor 4: Educational Progress Achieved	.01	.01
Factor 5: Schooling/Training Motive for Enlistment	.17**	5.44
Factor 6: Personal Improvement Reason for Enlistment	.07	.90
Factor 7: Institutional/Patriotic Soldier	.24**	9.64
Factor 8: Occupational/Economic Soldier	-.05	.46
Satisfied with Army	.03	.04
Effect of Army Service on Satisfaction of Relationship with Spouse During Army Service	.30*	2.73
Effect of Army Service on Satisfaction of Relationship with Children During Army Service	-.09	.17
Valuable Army Experience	.29	1.57
Age	-.02	.84
Black	.35*	5.32
Number of Enlistment Terms Served	-.07	.39
Male	-.18	1.29
Education at Enlistment	.02	.21
Enlistment Bonus Recipients	.31*	5.05

TABLE 2
LOGIT REGRESSION FOR SATISFACTION WITH
RESERVE/NATIONAL GUARD UNITS (continued)

Predictor	Beta Coefficient	Chi Square
Factor 8: Occupational/Economic Soldier (continued)		
Number of Children	-.03	.28
Veteran's Income	.01*	4.15
Family Income of Veteran	.00	2.65
Attritees (involuntary)	-2.08**	45.91
Career-intentional Soldiers	.27*	4.61
Intercept	-1.46	7.59

N = 2,232; -2 log likelihood ratio = 2,077.50; Chi square = 181.4

* Significant at the 0.10 level

** Significant at the 0.01 level

These programs may be financed from non-appropriated funds. The positive effect produced by these programs can more than offset the negative contribution made by such detractors as : the required family separations for deployment and training, apathetic officers, too many rules, and unfriendly peers. The net positive effect of an increase in family satisfaction can help increase job satisfaction.

In the current climate of downsizing the active Army, the former Secretary of the Army, Mr. John O. Marsh (1990) rightly notes:

"Active Reserve and National Guard Duty: Reductions in the Active Force will produce heavier reliance on Reserve and Guard units. In peacetime, only small fraction of these personnel are on full-time duty. A significant increase in this fraction would yield great dividends in readiness and provide opportunities for full-time soldiers who otherwise would be separated to continue earning retirement credit".

"Another possibility is to fill out or augment active divisions and other components with Guard and Reserve units. This could increase opportunities for noncommissioned officers to continue their military careers and would keep available a professional cadre".

SELECTED REFERENCES

- Baumol, W. (1985). Productivity Growth and U.S. Competitiveness (Ed.), New York, Oxford University Press.
- Ben-Akiva, M. & S. R. Lerman (1986). Discrete Choice Analysis, (Cambridge, Massachusetts, M.I.T.).
- Binkin, M. (1986). Military Technology and Defense Manpower, Brookings, Washington, DC.
- Borjas, G. J. (1970). "Job Satisfaction, Wages, and Unions", Journal of Human Resources, Winter, 21-41.
- Dalton, A. H. & J. Marcis (1986). "The Determinants of Job Satisfaction for Young Males and Females", Atlantic Economic Journal, XIV (3), September.
- Freeman, R. B. (1978). "Job Satisfaction as an Economic Variable", American Economic Review, May, 135-141.
- Gollop, F. M. & D. W. Jorgenson (1980). "US Productivity Growth by Industry" in John W. Kendrick (ed.) New Developments in Productivity Research, New York, National Bureau of Economic Research.
- Hopkins, A. H. (1983). Work and Job Satisfaction in the Public Sector, New Jersey, Rowman & Allanheld, xii, 146.
- Lakhani, H. (1988). "The Effect of Pay and Retention Bonuses on Quit Rates in the US Army," Industrial and Labor Relations Review, 41(3), April, 430-438.
- Lakhani, H. (1989). "The Determinants of Satisfaction with Family Life: An Interdisciplinary Analysis of the US Army. In Kozik, T. J. and D. G. Jansson (eds.) The Worker in Transition: Technological Change. 191-199. New York: The American Society of Mechanical Engineers.
- Lawler, E. E. (1967). "Attitude Surveys and Job Performance", Personnel Administration, XXX, September-October, 3-ff.
- Liou, K., R. D. Sylvia & G. Bunk (1990). Non-work Factors and Job Satisfaction Revisited. Human Relations, 43(1), 77-86, January.

- Locke, E. A., P. C. Smith, L. M. Kendall, C. L. Hulin & A. M. Miller (1964). "Convergent and Discriminant Validity for Areas and Methods of Rating Job Satisfaction." Journal of Applied Psychology, 48, 313-319.
- Marsh, J. O. (1990). "Cutting the Army: The Human Dimension". The Washington Post. May 28.
- Moskos, C. C. (1986). "Success Story: Blacks in the Army," The Atlantic Monthly, May: 64-72.
- Parker, W. E. & R. W. Kleemeier (1951). Human Relations in Supervision: Leadership in Management, New York, McGraw-Hill, p. 10.
- Porter, L. W. & E. E. Lawler, III (1968). "What Job Attitudes Tell About Motivation", Harvard Business Review, XLVI, January-February, 118-136.
- Segal, D. R. (1986). "Measuring the Institutional/Occupational Change Thesis: Armed Forces and Society, 3, 351-376.
- Schank, J. F., S. J. Bodilly & A. A. Barbour (1987). Cost Analysis of Reserve Force Change, Rand Corporation Report R-3492-RA, May, p. 20, Santa Monica, California.
- Simon, H. A. (1986). "Rationality in Psychology and Economics", Journal of Business, 59(4), part 2, S209-224.
- Stone, E. F., R. T. Mowday & L. W. Porter (1977). "Higher order need strengths as moderators of the job scope - job satisfaction relationship". Journal of Applied Psychology, 62(4), 466-471.
- Strauss, G. (1968). "Human Relations - 1968 Style", Industrial Relations, VII, May, p. 264.
- The Washington Post. "Military Chiefs Detail Plans to Cut Troops, Weapons. May 12, 1990, p.A1, A12.
- Vroom, V. (1964). Work and Motivation, New York, Wiley.
- Wanous, J. P. & E. E. Lawler, III (1972). "Measurement and Meaning of Job Satisfaction." Journal of Applied Psychology, 56(2), 95-105.
- Weiland, T. A., E. Schmitz, D. Horne & C. Gilroy, (1986). "Determinant of Army Attrition: An MOS-Specific Model," U. S. Army Research Institute Working Paper, MPPRG 87-5, October, Alexandria, Virginia.

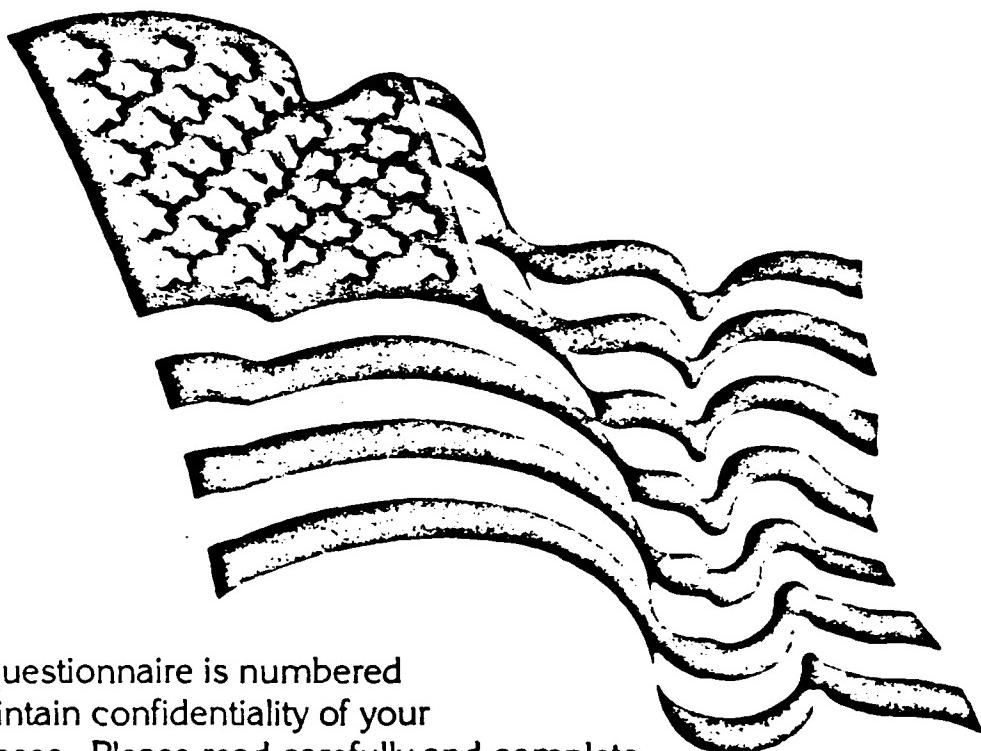
Westat, Inc. (1986). The 1985 Army Experience Survey Data Sourcebook and User's Manual, Research Note 86-01 (AD A173 826) prepared for the U.S. Army Research Institute, Alexandria, Virginia, January; Tabular Descriptions of First Term Separatees, Volumes 1 and 2, Research Product 86-01 (AD A174 819) and 86-02 (AD A174 868) prepared for the U.S. Army Research Institute, Alexandria, Virginia, January.

Wilensky, H. L. (1960). Work, careers and social integration. International Social Science Journal, 12, 543-560.

APPENDIX
ARMY EXPERIENCE SURVEY

ARMY EXPERIENCE SURVEY

OMB 0702-0065
EXP 31 JAN 88



This questionnaire is numbered to maintain confidentiality of your responses. Please read carefully and complete all questions on this survey in the way that best reflects your feelings. Return this questionnaire as soon as possible in the postage-paid envelope provided. Thank you.

ARI PT. 5604

U.S. ARMY RESEARCH INSTITUTE
c/o WESTAT, Inc.
1650 Research Boulevard
Rockville, Maryland 20850
Spring 1985

NOTE:

Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of the information that is collected.

The Department of the Army may collect the information requested in this survey under the authority of 10 United States Code 137.

Providing information in this questionnaire is voluntary. Failure to respond to any particular question will not result in any penalty for the respondent.

The information collected in this survey and from Army files will be used for research and analysis purposes only. The Army Research Institute, under guidance of the Office of the Deputy Chief of Staff for Personnel, has primary research and analysis responsibility.

**WE WOULD LIKE TO BEGIN BY ASKING YOU A FEW QUESTIONS ABOUT YOUR SCHOOLDG
EXPERIENCE BEFORE, DURING, AND AFTER YOUR SERVICE IN THE ARMY.**

1a. **First**, what is the highest grade or degree that you had completed when you **entered** the Army? (CIRCLE ONE NUMBER)

- 1 LESS THAN HIGH SCHOOL (1 TO 8 YEARS)
- 2 SOME HIGH SCHOOL BUT DID NOT GRADUATE
- 3 GED
- 4 CERTIFICATE OF COMPLETION/ATTENDANCE
- 5 GRADUATED HIGH SCHOOL
- 6 SOME COLLEGE BUT DID NOT GRADUATE
- 7 2 YEAR COLLEGE DEGREE
- 8 4 YEAR COLLEGE DEGREE
- 9 GRADUATE DEGREE
- 10 OTHER (FOR EXAMPLE, VOCATIONAL, TECHNICAL, BUSINESS, OR SECRETARIAL SCHOOL)

1b. **Next**, what is the highest grade or degree that you had completed when you **separated** from the Army? (CIRCLE ONE NUMBER)

- 1 LESS THAN HIGH SCHOOL (1 TO 8 YEARS)
- 2 SOME HIGH SCHOOL BUT DID NOT GRADUATE
- 3 GED
- 4 CERTIFICATE OF COMPLETION/ATTENDANCE
- 5 GRADUATED HIGH SCHOOL
- 6 SOME COLLEGE BUT DID NOT GRADUATE
- 7 2 YEAR COLLEGE DEGREE
- 8 4 YEAR COLLEGE DEGREE
- 9 GRADUATE DEGREE
- 10 OTHER (FOR EXAMPLE, VOCATIONAL, TECHNICAL, BUSINESS, OR SECRETARIAL SCHOOL)

1c. Last, what is the highest grade or degree that you have completed since you left the Army?
(CIRCLE ONE NUMBER)

- 1 LESS THAN HIGH SCHOOL (1 TO 8 YEARS)
- 2 SOME HIGH SCHOOL BUT DID NOT GRADUATE
- 3 GED
- 4 CERTIFICATE OF COMPLETION/ATTENDANCE
- 5 GRADUATED HIGH SCHOOL
- 6 SOME COLLEGE BUT DID NOT GRADUATE
- 7 2 YEAR COLLEGE DEGREE
- 8 4 YEAR COLLEGE DEGREE
- 9 GRADUATE DEGREE
- 10 OTHER (FOR EXAMPLE, VOCATIONAL, TECHNICAL, BUSINESS, OR SECRETARIAL SCHOOL)

2. Are you currently enrolled in any type of training or schooling? (CIRCLE ONE NUMBER)

- 1 YES, ENROLLED FULL-TIME
- 2 YES, ENROLLED PART-TIME
- 3 NO, NOT ENROLLED

3. How important was the opportunity to receive financial aid for education to your decision to enlist in the Army? (CIRCLE ONE NUMBER)

- 1 VERY IMPORTANT
- 2 IMPORTANT
- 3 NOT VERY IMPORTANT
- 4 NOT AT ALL IMPORTANT

Now we would like to ask you some questions about work

4. Which of the following best describes your employment status at the present time?
(CIRCLE ONE NUMBER)

- 1 EMPLOYED FULL-TIME (35 OR MORE HOURS PER WEEK)
- 2 EMPLOYED PART-TIME (LESS THAN 35 HOURS PER WEEK), BUT LOOKING FOR FULL-TIME EMPLOYMENT
- 3 EMPLOYED PART-TIME (LESS THAN 35 HOURS PER WEEK)
- 4 NOT EMPLOYED BUT LOOKING FOR WORK
- 5 NOT EMPLOYED AND NOT LOOKING FOR WORK



(Q. 4a - 4e REFER TO YOUR **CURRENT** JOB. IF YOU WORK **MORE** THAN ONE JOB, PLEASE ANSWER REFERRING TO YOUR **MAIN** JOB.)

- 4a. What kind of business or industry do you work for? (Describe the nature of the business at the location where you are employed. EXAMPLE: hospital, newspaper publishing, mail order house, auto engine manufacturing, breakfast cereal manufacturing.)

KIND OF BUSINESS/INDUSTRY: _____

- 4b. What is your job title? (EXAMPLE: registered nurse, personnel manager, supervisor of order department, gasoline engine assembler, grinder operator.)

JOB TITLE: _____

- 4c. What are your main activities or duties? (EXAMPLE: patient care, directing hiring policies, supervising order clerks, assembling engines, operating grinding mill.)

MAIN ACTIVITIES OR DUTIES: _____

4d. Overall, how satisfied are you with your **current** job? (CIRCLE ONE NUMBER)

- 1 VERY SATISFIED
- 2 SATISFIED
- 3 DISSATISFIED
- 4 VERY DISSATISFIED

4e. How similar are the job skills you developed in the Army to those required in your **current** job?
(CIRCLE ONE NUMBER)

- 1 VERY SIMILAR
- 2 SIMILAR
- 3 DISSIMILAR
- 4 VERY DISSIMILAR

5. How many different full-time jobs with different employers (35 or more hours per week) have you had since you left the Army? (IF NONE, WRITE "0.")

NUMBER OF FULL-TIME JOBS: _____ →



6. How difficult was it to get your first **full-time** job after leaving the Army? (CIRCLE ONE NUMBER)

- 1 VERY DIFFICULT
- 2 DIFFICULT
- 3 EASY
- 4 VERY EASY

7. Did you have a full-time job lined up before you left the Army? (CIRCLE ONE NUMBER)

- 1 YES
- 2 NO

8. Compared to just before you left active service, would you say that your standard of living is now:
(CIRCLE ONE NUMBER)

- 1 A LOT BETTER
- 2 SOMEWHAT BETTER
- 3 ABOUT THE SAME
- 4 SOMEWHAT WORSE
- 5 A LOT WORSE

THE NEXT QUESTION ASKS YOU ABOUT YOUR USE OF SERVICE BENEFITS. (NOTE: IF YOU HAVE NOT RECEIVED ANY BENEFITS SINCE LEAVING ACTIVE SERVICE, CHECK HERE _____ AND SKIP TO Q. 10.)

9. Below is a list of benefits. **First**, circle the letter next to each benefit you have received, or are currently receiving, since leaving the service.

Then, if you have received the benefit, place the amount of money within one hundred dollars that you have received to date, or are currently receiving per month, in the space provided to the right of the benefit.

BENEFIT (CIRCLE LETTER FOR EACH BENEFIT RECEIVED)	AMOUNT RECEIVED (within \$100)
a. ARMY COLLEGE FUND (ACF)	\$ _____ to date
b. VETERANS EDUCATIONAL ASSISTANCE PROGRAM (VEAP)	\$ _____ to date
c. GI BILL EDUCATION BENEFITS	\$ _____ to date
d. RETIREMENT PAY	\$ _____ per month
e. OTHERS (PLEASE SPECIFY AND WRITE WHETHER AMOUNT IS "TO DATE" OR "PER MONTH") _____ _____ _____ _____	\$ _____ \$ _____ \$ _____ \$ _____

WE WOULD NOW LIKE TO TURN TO ANOTHER TOPIC AND ASK YOU SOME QUESTIONS ABOUT YOUR SERVICE IN THE ARMY.

10. Did you receive a cash enlistment bonus when you first joined the Army? (CIRCLE ONE NUMBER)

- 1 YES
2 NO

11. Did you receive an Army College Fund (ACF) incentive? (ACF is an extra amount of money contributed by the Army under the Veterans Education Assistance Program (VEAP). In 1980-81, the ACF was called Ultra VEAP or Super VEAP Kicker). (CIRCLE ONE NUMBER)

- 1 YES
2 NO

12. Below is a list of reasons that people may give for joining the Army. Using the scale on the right, circle the number that best represents how important each reason was for you in joining the Army.

(CIRCLE ONE NUMBER FOR EACH ITEM a-m)	Very Important	Important	Not Very Important	Not at All Important
a. CHANCE TO BETTER MYSELF	1	2	3	4
b. TO GET TRAINED IN A SKILL	1	2	3	4
c. MONEY FOR A COLLEGE EDUCATION	1	2	3	4
d. TO SERVE MY COUNTRY	1	2	3	4
e. I WAS UNEMPLOYED	1	2	3	4
f. TO PROVE THAT I COULD MAKE IT	1	2	3	4
g. TO BE AWAY FROM HOME ON MY OWN	1	2	3	4
h. EARN MORE MONEY	1	2	3	4
i. TRAVEL	1	2	3	4
j. GET AWAY FROM A PERSONAL PROBLEM	1	2	3	4
k. FAMILY TRADITION TO SERVE	1	2	3	4
l. NEEDED TIME TO MATURE	1	2	3	4
m. I WAS DRAFTED OR ENLISTED TO AVOID THE DRAFT	1	2	3	4

13. When you first entered the Army, did you plan to pursue the Army as a career (a minimum of 20 years)? (CIRCLE ONE NUMBER)

- 1 DEFINITELY
- 2 PROBABLY
- 3 PROBABLY NOT
- 4 DEFINITELY NOT

14. How much do you agree with the following statement: "I am proud to have been a soldier"? (CIRCLE ONE NUMBER)

- 1 STRONGLY AGREE
- 2 AGREE
- 3 DISAGREE
- 4 STRONGLY DISAGREE

15. In general, how satisfied were you with your Army service? (CIRCLE ONE NUMBER)

- 1 VERY SATISFIED
- 2 SATISFIED
- 3 DISSATISFIED
- 4 VERY DISSATISFIED

16. Whether you were satisfied or not, how valuable was your Army experience to you? (CIRCLE ONE NUMBER)

- 1 VERY VALUABLE
- 2 VALUABLE
- 3 NOT VERY VALUABLE
- 4 NOT AT ALL VALUABLE

16a. Please explain why you feel this way. (PLEASE PRINT YOUR ANSWER)

17. Overall, compared to being in the Army, would you say you are: (CIRCLE ONE NUMBER)

- 1 MUCH MORE SATISFIED AS A CIVILIAN
- 2 MORE SATISFIED AS A CIVILIAN
- 3 JUST AS SATISFIED AS A CIVILIAN
- 4 LESS SATISFIED AS A CIVILIAN
- 5 MUCH LESS SATISFIED AS A CIVILIAN

18. Now we are interested in knowing what type of effect, if any, your Army service had on various aspects of your life. Using the scale on the right, circle the number that best represents your feelings about each item listed below.

(CIRCLE ONE NUMBER FOR EACH ITEM a-m)					
What type of effect, if any, did your Army service have on you:	Strong Positive Effect	Positive Effect	No Effect	Negative Effect	Strong Negative Effect
a. DEVELOPMENT OF JOB SKILLS	1	2	3	4	5
b. SELF-CONFIDENCE	1	2	3	4	5
c. LEADERSHIP ABILITY	1	2	3	4	5
d. ABILITY TO WORK WITH OTHERS AS A TEAM	1	2	3	4	5
e. RESPECT FOR AUTHORITY	1	2	3	4	5
f. PRIDE IN SELF	1	2	3	4	5
g. OPENNESS TO NEW IDEAS	1	2	3	4	5
h. PRIDE IN SERVING YOUR COUNTRY	1	2	3	4	5
i. ABILITY TO MAKE FRIENDS	1	2	3	4	5
j. ESTABLISHING INDEPENDENCE	1	2	3	4	5
k. SELF DISCIPLINE	1	2	3	4	5

ANSWER THIS ITEM IF YOU WERE MARRIED DURING YOUR ARMY SERVICE					
What type of effect, if any, did your Army service have on you:	Strong Positive Effect	Positive Effect	No Effect	Negative Effect	Strong Negative Effect
I. RELATIONSHIP WITH SPOUSE	1	2	3	4	5

ANSWER THIS ITEM IF YOU WERE A PARENT DURING YOUR ARMY SERVICE					
What type of effect, if any, did your Army service have on you:	Strong Positive Effect	Positive Effect	No Effect	Negative Effect	Strong Negative Effect
m. RELATIONSHIP WITH CHILDREN	1	2	3	4	5

19. Below is a list of reasons that people may give for getting out of the Army. Using the scale on the right, circle the number that best represents how important **each** reason was for you in leaving the Army.

(CIRCLE ONE NUMBER FOR EACH ITEM a-w)	Extremely Important	Very Important	Important	Of Little Importance	Not True or Not Important
a. OFFICERS DIDN'T CARE ABOUT ENLISTED PEOPLE	1	2	3	4	5
b. YOU COULD GET A GOOD CIVILIAN JOB	1	2	3	4	5
c. FAILED TO GET PROMOTED	1	2	3	4	5
d. POOR NCO LEADERSHIP	1	2	3	4	5
e. TOO MANY PCS MOVES	1	2	3	4	5
f. PAY WAS TOO LOW	1	2	3	4	5
g. WORKING HOURS WERE TOO LONG	1	2	3	4	5
h. NO CREDIT FOR DOING A GOOD JOB	1	2	3	4	5
i. TOO MUCH FAMILY SEPARATION	1	2	3	4	5
j. YOU WANTED TO GO TO SCHOOL/COLLEGE	1	2	3	4	5
k. COULDN'T GET EDUCATION OR SKILL YOU WANTED	1	2	3	4	5
l. DIDN'T GET ALONG WITH YOUR NCOS	1	2	3	4	5
m. FAMILY PROBLEMS AT HOME	1	2	3	4	5
n. TOO MANY MILITARY RULES AND REGULATIONS	1	2	3	4	5
o. YOU WERE PREGNANT/JUST HAD A BABY	1	2	3	4	5
p. POOR RELATIONS WITH FELLOW SOLDIERS	1	2	3	4	5
q. FAMILY WANTED YOU TO GET OUT OF ARMY	1	2	3	4	5
r. TOO MUCH UNFAIR TREATMENT	1	2	3	4	5
s. NOT ENOUGH CHANCE TO DO INTERESTING/CHALLENGING WORK	1	2	3	4	5
t. FAMILY SUPPORT SERVICES INADEQUATE	1	2	3	4	5
u. WANTED TO USE SERVICE BENEFITS	1	2	3	4	5
v. NOT BEING TREATED WITH RESPECT	1	2	3	4	5
w. SEXUAL HARASSMENT	1	2	3	4	5

20. If you had it to do all over again, would you decide to join the Army? (CIRCLE ONE NUMBER)

- 1 DEFINITELY
- 2 PROBABLY
- 3 PROBABLY NOT
- 4 DEFINITELY NOT

21. If you had it to do all over again, would you have decided to stay in the Army?
(CIRCLE ONE NUMBER)

- 1 DEFINITELY
- 2 PROBABLY
- 3 PROBABLY NOT
- 4 DEFINITELY NOT

22. Now, tell us in your own words the most important reason that you separated from the Army.
(PLEASE PRINT YOUR ANSWER)

23. What one thing could the Army have done, if anything, that would have kept you from leaving the service? (PLEASE PRINT YOUR ANSWER)

24. How satisfied were you with the overall outprocessing/separation experience when you left active service? (CIRCLE ONE NUMBER)

- 1 VERY SATISFIED
- 2 SATISFIED
- 3 DISSATISFIED
- 4 VERY DISSATISFIED

24a. Please describe the one thing that you were most dissatisfied with in your overall outprocessing/separation experience. (PLEASE PRINT YOUR ANSWER)

25. Below is a list of items for comparing Army life and civilian life. For each item, please tell us whether you think that it is more likely to occur in Army life, in civilian life, or equally likely in either one.

(CIRCLE ONE NUMBER FOR EACH ITEM a-x)	More Likely In Army Life	More Likely in Civilian Life	Equally Likely In Either
a. CHANCE FOR ADVENTURE	1	2	3
b. PROMOTION OPPORTUNITIES	1	2	3
c. GOOD SUPERVISORS	1	2	3
d. OPPORTUNITY FOR A STABLE HOME LIFE	1	2	3
e. PERSONAL FREEDOM	1	2	3
f. OPPORTUNITIES FOR CONTINUED SELF IMPROVEMENT AND DEVELOPMENT	1	2	3
g. DEVELOPMENT OF COMMUNITY TIES	1	2	3
h. RECREATION OPPORTUNITIES	1	2	3
i. CREDIT FOR DOING A GOOD JOB	1	2	3
j. TRAVEL OPPORTUNITIES	1	2	3
k. PHYSICAL TRAINING AND CHALLENGE	1	2	3
l. CHANCE TO DO SOMETHING FOR YOUR COUNTRY	1	2	3
m. OPPORTUNITY TO LEARN VALUABLE TRADE OR SKILL	1	2	3
n. JOB SECURITY, THAT IS, A STEADY JOB	1	2	3
o. GOOD INCOME	1	2	3
p. HAVING A LOT IN COMMON WITH CO-WORKERS	1	2	3
q. OVERALL SUPPORT SERVICES FOR FAMILY LIFE	1	2	3
r. EASY WORK/DUTIES	1	2	3
s. ENJOYING YOUR WORK	1	2	3
t. ADEQUATE RETIREMENT BENEFITS	1	2	3
u. EQUAL PAY AND OPPORTUNITY FOR MEN AND WOMEN	1	2	3
v. GOOD ENVIRONMENT FOR REARING CHILDREN	1	2	3
w. FREEDOM FROM SEXUAL HARASSMENT	1	2	3
x. OPPORTUNITIES FOR MAKING FRIENDS	1	2	3

26. When you talk about Army-related topics with acquaintances such as friends or neighbors, how positive are you about the Army in general? (CIRCLE ONE NUMBER)

- 1 VERY POSITIVE
- 2 POSITIVE
- 3 NEGATIVE
- 4 VERY NEGATIVE
- 5 NEVER TALK ABOUT ARMY

27. If a good friend of yours asked your advice about joining the Army, would you say it was: (CIRCLE ONE NUMBER)

- 1 A WASTE OF TIME
- 2 UP TO HIM OR HER
- 3 A GOOD IDEA

28. Specifically, what would you tell a good friend about joining or not joining the Army? (PLEASE PRINT YOUR ANSWER)

29. Approximately how many people would you say you have talked with about their joining or not joining the Army since you left active service? (IF NONE, WRITE "0.")

NUMBER OF PEOPLE: _____

30. Would you like to see your son or daughter, at some point, join the military? Answer even if you presently have no children or do not plan to have children. (CIRCLE ONE NUMBER IN EACH COLUMN)

30a. YOUR SON?

- 1 YES
- 2 NO

30b. YOUR DAUGHTER?

- 1 YES
- 2 NO

31. Think about ways Army service could be **improved** for future enlistees. What would you suggest the Army do to make the Army experience more positive or useful to them?
(PLEASE PRINT YOUR ANSWER)
-
-
-
-
-
-

32. Below is a list of service options. Using the scale on the right, please circle the number that best represents how you would feel about a program that required each service option.

(CIRCLE ONE NUMBER FOR EACH ITEM a-d)	Strongly Favor It	Probably Favor It	Probably Oppose It	Strongly Oppose It
a. ALL YOUNG MEN TO GIVE ONE YEAR OF SERVICE IN THE MILITARY	1	2	3	4
b. ALL YOUNG WOMEN TO GIVE ONE YEAR OF SERVICE IN THE MILITARY	1	2	3	4
c. ALL YOUNG MEN TO GIVE ONE YEAR OF SERVICE TO THE NATION — EITHER IN THE MILITARY OR IN NONMILITARY WORK SUCH AS IN HOSPITALS OR WITH ELDERLY PEOPLE	1	2	3	4
d. ALL YOUNG WOMEN TO GIVE ONE YEAR OF SERVICE TO THE NATION — EITHER IN THE MILITARY OR IN NONMILITARY WORK SUCH AS IN HOSPITALS OR WITH ELDERLY PEOPLE	1	2	3	4

33. Have you joined a National Guard or Reserve unit since you left active service?
(CIRCLE ONE NUMBER)

- 1 YES, ARMY RESERVE
- 2 YES, AIR FORCE RESERVE
- 3 YES, NAVY RESERVE
- 4 YES, MARINE CORPS RESERVE
- 5 YES, ARMY NATIONAL GUARD
- 6 YES, AIR NATIONAL GUARD

7 NO

33a. IF NO: How likely is it that you will join a National Guard or Reserve unit? Would you say: (CIRCLE ONE NUMBER)

- 1 DEFINITELY
- 2 PROBABLY
- 3 PROBABLY NOT
- 4 DEFINITELY NOT

33b. IF YES: How satisfied are you with your National Guard or Reserve unit?
(CIRCLE ONE NUMBER)

- 1 VERY SATISFIED
- 2 SATISFIED
- 3 DISSATISFIED
- 4 VERY DISSATISFIED



33c. Which statement below best explains why you are not now in a Reserve or National Guard Unit?
(CIRCLE ONE NUMBER)

- 1 MY COMMUNITY DOES NOT HAVE THE KIND OF UNIT I SHOULD BE IN.
- 2 IT WOULD INTERFERE WITH MY CIVILIAN JOB.
- 3 IT WOULD INTERFERE WITH MY FAMILY RESPONSIBILITIES.
- 4 I APPLIED BUT WAS NOT ACCEPTED.
- 5 I WAS NOT INTERESTED.
- 6 I COMPLETED MY MILITARY SERVICE OBLIGATION.
- 7 I WAS NOT ELIGIBLE.

-
34. What associations for former military personnel do you presently belong to? (PLEASE PRINT THE NAMES OF THESE ORGANIZATIONS BELOW. IF NONE, CIRCLE ANSWER NUMBER 1.)

1 NONE

2 NAMES OF ORGANIZATIONS (PLEASE SPECIFY)

35. Whether or not you now belong to an organization for former military personnel, would you be interested in joining an association for former soldiers? (CIRCLE ONE NUMBER)

1 DEFINITELY

2 PROBABLY

3 PROBABLY NOT

4 DEFINITELY NOT

36. Would you be interested in helping recruiters identify potential enlistees? (CIRCLE ONE NUMBER)

1 DEFINITELY

2 PROBABLY

3 PROBABLY NOT

4 DEFINITELY NOT

37. Would you be interested in speaking to groups of high school students about the Army? (CIRCLE ONE NUMBER)

1 DEFINITELY

2 PROBABLY

3 PROBABLY NOT

4 DEFINITELY NOT

38. Would you be interested in receiving a newsletter or magazine that kept you up-to-date on information useful to former soldiers? (CIRCLE ONE NUMBER)

1 DEFINITELY

2 PROBABLY

3 PROBABLY NOT

4 DEFINITELY NOT

FINALLY WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT YOURSELF

39. Are you: (CIRCLE ONE NUMBER)

1 MALE

2 FEMALE

40. What is your current Zip Code? (PRINT NAME OF COUNTRY IF **OUTSIDE U.S.**)

ZIP CODE:

COUNTRY: _____

41. What year did you first enter active service?

YEAR OF ENTRY: 19 _____

42. What was your separation date from the Army?

MONTH: _____

YEAR: 19 _____

43. Which of the following statements best describes the nature of your separation from the Army? (CIRCLE ONE NUMBER)

- 1 I COMPLETED THE FULL TERM OF MY LAST ENLISTMENT OR RE-ENLISTMENT CONTRACT.
- 2 I WAS RELEASED FROM SERVICE A FEW MONTHS EARLY BECAUSE OF A HOLIDAY OR BECAUSE OF THE END OF THE YEAR.
- 3 I SERVED LESS THAN THE FULL TERM OF MY LAST ENLISTMENT OR RE-ENLISTMENT.

44. What is your year of birth?

YEAR OF BIRTH: 19 _____

45. Which of the following best describes your racial or ethnic identification? (CIRCLE ONE NUMBER)

- 1 HISPANIC
- 2 BLACK, NOT OF HISPANIC ORIGIN
- 3 WHITE, NOT OF HISPANIC ORIGIN

OTHER (SPECIFY) _____

46. Have you ever been married? (CIRCLE ONE NUMBER)



1 YES

2 NO

46a. What was your marital status when you left active service? (CIRCLE ONE NUMBER)

- 1 MARRIED
- 2 WIDOWED
- 3 DIVORCED
- 4 SEPARATED
- 5 SINGLE, NEVER MARRIED

46b. How old were you when you were first married?

AGE WHEN FIRST MARRIED: _____

46c. What is your current marital status? (CIRCLE ONE NUMBER)

- 1 MARRIED
- 2 WIDOWED
- 3 DIVORCED
- 4 SEPARATED

(IF MARRIED)

46d. Is your spouse presently employed or self-employed for pay? (CIRCLE ONE NUMBER)

- 1 YES, EMPLOYED FOR PAY FULL-TIME (35 HOURS PER WEEK OR MORE)
- 2 YES, EMPLOYED FOR PAY PART-TIME (LESS THAN 35 HOURS PER WEEK)
- 3 NO, NOT EMPLOYED

47. How many children do you have? (IF NONE, WRITE "0.")

NUMBER OF CHILDREN: _____ → A rectangular button with the text "IF NO CHILDREN SKIP TO D-8" in white, bold, sans-serif font, enclosed in a black border.

47a. What is the age of the oldest child you have? (IF LESS THAN ONE YEAR OLD, WRITE "0.")

AGE OF OLDEST CHILD: _____

48. What state were you living in when you joined the Army? (PRINT NAME OF COUNTRY IF OUTSIDE U.S.)

NAME OF STATE: _____

49. How many terms of active enlistment did you serve?

- 1 LESS THAN ONE ENLISTMENT
- 2 ONE ENLISTMENT
- 3 TWO ENLISTMENTS
- 4 THREE ENLISTMENTS
- 5 FOUR OR MORE ENLISTMENTS

50. How long were you obligated to serve during your **first** tour of active service in the Army? (CIRCLE ONE NUMBER)

- 1 I ENLISTED FOR TWO YEARS
- 2 I WAS DRAFTED FOR TWO YEARS
- 3 I ENLISTED FOR THREE YEARS
- 4 I ENLISTED FOR FOUR YEARS
- 5 I ENLISTED FOR FIVE OR MORE YEARS
- 6 OTHER (SPECIFY) _____

51. Suppose the MOS you signed up for did not offer a 2 year option. What would you have done? (CIRCLE ONE NUMBER)

- 1 DOES NOT APPLY TO ME (I WAS DRAFTED, OR I ENLISTED FOR 3 OR MORE YEARS)
- 2 SIGNED UP FOR THE SAME JOB ANYWAY
- 3 SIGNED UP FOR A DIFFERENT JOB IN THE ARMY WHETHER OR NOT IT HAD A 2 YEAR OPTION
- 4 SIGNED UP FOR A DIFFERENT JOB IN THE ARMY ONLY IF IT HAD A 2 YEAR OPTION
- 5 TRIED TO JOIN A DIFFERENT SERVICE
- 6 NOT ENLISTED AT ALL

52. How much are you earning **on the average** each month (before taxes) from all sources? (EXCLUDE MILITARY RETIREMENT PAY. INCLUDE EVERYTHING ELSE, E.G., WAGES, SALARIES, TIPS, COMMISSIONS, INTEREST AND DIVIDENDS.) Give your best estimate. (IF NO INCOME, WRITE "0.")

EARNINGS PER MONTH: \$ _____

53. How much is your entire **household, Including yourself**, earning on the average each month (before taxes) from all different kinds of work? (EXCLUDE MILITARY RETIREMENT PAY. INCLUDE EVERYTHING ELSE, E.G., WAGES, SALARIES, TIPS, COMMISSIONS, INTEREST AND DIVIDENDS.) Give your best estimate. (IF NO INCOME, WRITE "0.")

EARNINGS PER MONTH: \$ _____

54. Is there anything else you would like to tell us about your experience in the Army, or about how you feel the Army experience has affected you since leaving the Army? (PLEASE PRINT YOUR ANSWER.)

THIS COMPLETES THE QUESTIONNAIRE.

PLEASE LOOK OVER YOUR ANSWERS TO BE SURE YOU HAVE NOT OMITTED ANY QUESTIONS THAT APPLIED TO YOU.

THEN MAIL THE QUESTIONNAIRE IN THE ENCLOSED, POSTAGE-PAID ENVELOPE.

THANK YOU FOR YOUR COOPERATION AND ASSISTANCE.